



TORA * L03 91-196946/27 * J0 3121-424-A
Solid type electrochromic display element having good durability - comprises electrochromic layer comprising tungsten oxide and solid electrolyte layer between display and opposite-electrodes

TORAY IND INC 14.07.89-JP-183261 (11.07.90-JP-183426)

P81 (23.05.91) G02f-01/15

11.07.90 as 183426 (50TF)

Element comprises at least an electrochromic layer comprising of W oxide and a solid electrolyte layer between a display electrode and opposite electrode. The FT-IR transmission spectrum of the W oxide satisfies equations (A) and (B). A 1400 = absorbance at 1400 cm⁻¹; A 1800 = absorbance at 1800 cm⁻¹; A asterisk = max. absorbance at 1600-1650 cm⁻¹; A2500 = absorbance at 2500 cm⁻¹; A 4000 = absorbance at 4000 cm⁻¹, and A 3400 = absorbance at 3400 cm⁻¹.

Also new is (claimed); In mfg. an electrochromic display element, an electrochromic substance layer of W oxide is formed by vacuum plating under specific conditions.

Specifically the solid electrolyte is e.g. Ta oxide, Sr oxide, etc..

USE/ADVANTAGE - Useful for handwriting-input display element and card to which display function by handwriting is imparted, etc.. A whole solid type electrochromic display device which may draw an image and has good durability may be obtd.. (8pp Dwg.No.0/3)

C91-085246

$$2.0 \leq \frac{A^* - A1800}{(A1400 - A1800) \times 0.44} \leq 5.0 \quad (A)$$

$$1.5 \leq \frac{A3400 - A4000}{(A2500 - A4000) \times 0.40} \leq 5.0 \quad (B)$$

SONY L03 91-023728/04 = J0 3121-428-A
Controlling domain of nonlinear ferroelectric optics substrate - by applying DC or pulse voltage across substrate via patterned electrode to form local inverted domains in corresp. pattern

SONY CORP 17.07.89-JP-184362 (28.12.89-JP-344270)

V07 P81 (23.05.91) *EP-409104-A G02f-01/37

28.12.89 as 344270 (50MD)

A method of controlling domain to nonlinear ferroelectric optical material comprises arranging 1st electrode and 2nd electrode so as to face each other on the opposing main faces of single domain nonlinear ferroelectric optical material, making at least one of these electrodes face via an insulator material to the nonlinear ferroelectric optical material, and applying a prescribed DC voltage between the 1st and 2nd electrodes to form locally domain inversion part of a pattern corresp. to the electrode pattern.

USE/ADVANTAGE - Controlling the domain on a nonlinear ferroelectric optical material is used for the formation of periodical domain inversion part in e.g. SHG element. Periodical domain inversion structure of fine pattern can be accurately formed using a simple device. No change of refractive index of the domain inversion part is caused and the damage of crystal on the main face of the nonlinear ferroelectric optical material can be prevented as electric current does not flow directly into the optical material because of insulating material inserted between the electrodes and the optical material. (7pp)

CANO L03 90-529093/44 = J0 3121-462-A
Image forming - using biased pressure transfer roll to give good images independent of sheet thickness

CANON KK 19.07.89-JP-184422 (27.04.89-JP-111006)

489 G08 S06 P84 (A26 W02) (23.05.91) *EP-395061-A G03g-09/08 27.04.90 as 111980 (+ 19.7.89-JP-184421) (46SE)

The image forming process comprises developing and electrostatic latent image on a latent image holding member with the developer,

and transferring the developed image onto the transfer member. The developer includes 0.05-3 pts. wt. fine powder treated by silicone oil or silicone varnish, per 100 pts. wt. of the toner, and the transferring of the developed image onto the transfer member is performed by bringing the transferring means into contact with the latent image holding member with more than 3g/cm of the linear pressure, through the transfer member.

USE/ADVANTAGE - A transferred image faithfully to the latent image can be obtd. without being affected by the transfer member, and without being affected by a change in environmental conditions (22pp)

YAWA * L03 91-197067/27 * J0 3121-773-A
Planar polishing silicon wafers for IC - by oscillating polisher between centre of disk and outer periphery

NIPPON STEEL CORP 06.10.89-JP-259938

P61 (23.05.91) B24b-37/04

06.10.89 as 259938 (24TF)

Process is effected by oscillating a polisher between the centre of a disk and the outer periphery. The oscillating rate is controlled so that the oscillating speed up to the 1/4 circle of the disk is 3-6 and that at the outer peripheral portion of the disk is 1.5-3, taking the speed at the centre of the disk as 1.

Also claimed is a process in which the oscillating rate of the Si wafer is controlled according to the abrasion curve of the polishing cloth obtd. at the polishing of the wafer maintaining the oscillating rate to a constant value.

USE/ADVANTAGE - Wafer having a flatness of upto 2 micro-m is produced and is used for 16-M or higher IC's. (4pp Dwg.No.0/9) C91-085260

TTOC * L02 91-197072/27 * J0 3121-809-A
Clamping appts. for glazed prod. - includes a clamping belt which can be wound on to provide a fresh surface for successive clamping operations

TOTO KK 05.10.89-JP-260732

P64 (23.05.91) B28b-01/26 B28b-11/04 C04b-41/86

05.10.89 as 260732 (66RH)

A device for clamping a product formed by casting and having a glazed surface is equipped with a clamping belt which comes into contact with the surface of the product, and a mechanism for feeding the belt to change the clamping surface for each holding of the product.

ADVANTAGE - Glazed surface of the product can be held by fresh clamping surface to avoid forming of uneven glazed surface. (5pp Dwg.No.0/2)

C91-085263

TOAT * L02 91-197073/27 * J0 3121-810-A
Fibre mortar prod. for pipes, joints etc. - is prepd. by laminating wet sheet(s) of raw fibre material to inorganic powder-contg. paper layer

TOATOMIJI KK (TOSD) 04.10.89-JP-259411

P64 (23.05.91) B28b-01/52

04.10.89 as 259411 (132WB)

A fibre mortar prod. is prepd. by laminating at least one wet sheet made of fibre mortar raw material and at least one layer of paper contg. inorganic powder. The paper has high adhesive properties w.r.t. the fibre mortar raw material, to form a board. Pref. a fibre mortar prod. is prepd. by the above lamination process into a tube shape. The inorganic powder is a non-metal inorganic substance, a metal, or an insoluble salt. The inorganic powder contains as calcium carbonate major ingredient. The fibre is wood pulp, opt. contg. Rayon, Vinyon, etc.. Organic fibres, glass fibres, rock wool, etc. are useful. Other inorganic powders are siliceous stone, aluminium silicate, etc..

USE/ADVANTAGE - For water supply or discharge pipes, ventilation pipes, electric cable pipes, joints and boards. This prod. is free from asbestos. The inorganic powder contributes to high bending strength and flexibility, and also flame retardancy. Delamination resistance is high. (6pp Dwg.No.0/3)

C91-085264

TTOC * L02 91-197074/27 * J0 3121-811-A
Mfg. line for sanitary wares - includes pallet laminating means, pallet restoring conveyor and means to lay pallet against main conveyor

TOTO KK 05.10.89-JP-260731

P64 (23.05.91) B28b-05 B28b-11/04 B28b-15 C04b-41/86

05.10.89 as 260731 (134AG)

Sanitary ware mfg. line includes a pallet laminating means to pile up empty pallets at outlet of the grazing machine, a pallet restoring conveyor and a means to lay down pallets against the main conveyor.

ADVANTAGE - Smooth shifting of the works is obtd. (5p Dwg.No.0/3)

C91-085265